THE VETERINARY RECORD

FOUNDED BY WILLIAM HUNTING, F.R.C.V.S., 1888

No. 10. MARCH 6, 1948 VOL. 60.

Seasonal Variations in Faeces Worm-Egg Counts of Sheep

By

G. H. CUSHNIE AND E. G. WHITE

ROWETT RESEARCH INSTITUTE, ABERDEEN

The observations in this note arise from but are incidental to an experiment begun in October, 1946, to determine the effect of nutrition on the worm burden of sheep as indicated by weekly faeces egg counts. The nutritional aspect of the work will continue until October, 1948, at least before the full data are available for publication; but the distinct seasonal variations in faeces egg counts observed between October, 1946, and October, 1947, seemed of sufficient interest to justify their publication and a discussion of their significance at this stage.

Fifty Blackface ewes, 18 months old when purchased, were used in this work. They were divided into two groups of 25, and one of the groups was fed daily a measured amount of concentrate rich in protein as a supplement to normal grazing. The other 25 served as controls and received no supplement. From the age of six months it is known that the animals received no anthelminthic; and it is unlikely that they received any before this age.

For the purpose of this paper the ewes will be considered as one flock, and no further reference will be made at this stage to the nutritional side of the work. So far as could be observed, the amount of supplement did not disturb the normal daily consumption of grass or herbage by each individual sheep, and there was no difference in the mean faeces egg counts of the two groups.

GRAZING OF THE FLOCK

The ewes were purchased in October, 1946, Blackfaces being chosen mainly for their hardiness. From then until the end of the year, they grazed rotationally the leys around the Institute and during this period were mated with Blackface rams.

In early January, 1947, they were put on Brimmond Hill, an area of fairly good pasturage rising to 800 feet above sea level and about a mile from the Institute. They have grazed there ever since except for the lambing period of about five weeks, when they were in a field adjacent to the Institute buildings. The total hill area which the sheep covered during twelve months is 270 acres; but the actual pasturage is about 200 acres, since extensive patches of gorse bush are scattered over the hill. The concentration of sheep on the pasture for the period of observation ranged between 4 and 1·5 per acre; but these changes in concentration were not reflected in the faeces egg counts. It was the practice to gather the flock off the hill about 5 p.m. every evening, and leave them in a nine-acre field until 8 a.m. the following morning.

Because of the almost arctic winter conditions which prevailed in the early months of 1947, the flock was fed silage and hay during the period when grazing was impossible from the end of January to near the end of March, 1947, by which time lambing was almost complete. After lambing the ewes were returned to Brimmond Hill on April 10th, 1947.

EGG-COUNTING TECHNIQUE

In carrying out the observations recorded here, a modified McMaster technique (Gordon & Whitlock, 1939) was used, two cells being counted for each sheep and the results plotted on a graph as the average number of eggs per gramme (e.p.g.) of fresh faeces per ewe. The faeces, which were obtained by hand from the rectum, were examined almost always on the day of sampling and the same method of collection and preparation was observed throughout the whole of the work. Nematode egg counts were recorded under the three headings, "Nematodirus" (N), "Strongyloides" (S) and "Other Strongyles" (OS).

Since the lowest limit for a reliable count by this method is 100 e.p.g., animals with very low counts do not give accurate enough results for comparison week by week. It is our opinion, however, that the McMaster technique for counting worm eggs in sheep faeces is reliable when applied either to groups of animals or to individual animals with counts of 800 or more e.p.g. of faeces.

RESULTS

The graph (fig.) shows that the first counts done on October 22nd, 1946, averaged 170 OS e.p.g.; a slight rise followed during December, when the average was 250 e.p.g. For the next two months the levels were very much lower and averaged only 50 to 80 e.p.g. Thereafter, from February 25th, 1947, a sharp rise in egg production was noted and on March 31st, the average had reached 640 e.p.g. or nearly ten times the levels for January and February. For the next two or three weeks the counts fluctuated, after which there was a gradual fall during May, June and July to the level of 100 e.p.g. The counts persisted at this level throughout the remaining three months of the year of observation.

The figure shows that there was a marked increase in egg production in the spring during a prolonged period of very severe winter weather, when new infestation was highly improbable. Indeed, the animals had not had access to any pasture for five weeks before the rise began because of the considerable depth of snow. Further, infective larvae would not be likely to survive the heat and acidity of a silage pit for any length of time. In further support of the view that new infestations were not introduced by the silage feeding, it may be recorded that no livestock had ever grazed the pasturage from which the silage was cut.

Other facts regarding the egg output of sheep helminths as revealed by our figures are: (1) the very low levels produced in winter, and (2) the gradual drop in egg production during the early summer months, with the subsequent maintenance of a level actually lower than that of the previous autumn.

The low winter level is a reasonable expectation if one considers that the temperature outdoors during these months is usually much too low for rapid development of infective larvae. On the other hand, it is perhaps surprising that there should be such a marked drop in egg production during the summer months when climatic conditions are optimal for reinfestation and equally interesting that a high peak appears in the spring. These seasonal variations may be emphasised because the sheep were exposed to a heavy source of infestation since they spent at least six of the twelve months in a nine-acre field which must have become more heavily contaminated with sheep faeces each succeeding day.

It will be seen that the figures in the curve for Nematodirus spp. have been multiplied by ten in order to establish a reasonable relationship with the some eight "Other Strongyles" spp. which have all been grouped together. This has been done merely to demonstrate that the rise and fall of egg-laying in the Nematodirus group is almost identical with that of the "Other Strongyles" group. Moreover, weekly counts of the individual sheep reveal that about 80 per cent. of the flock showed a peak of egg production which was greater during the spring than at any other season; among the remaining 20 per cent., some remarkable fluctuations were noted throughout the year.

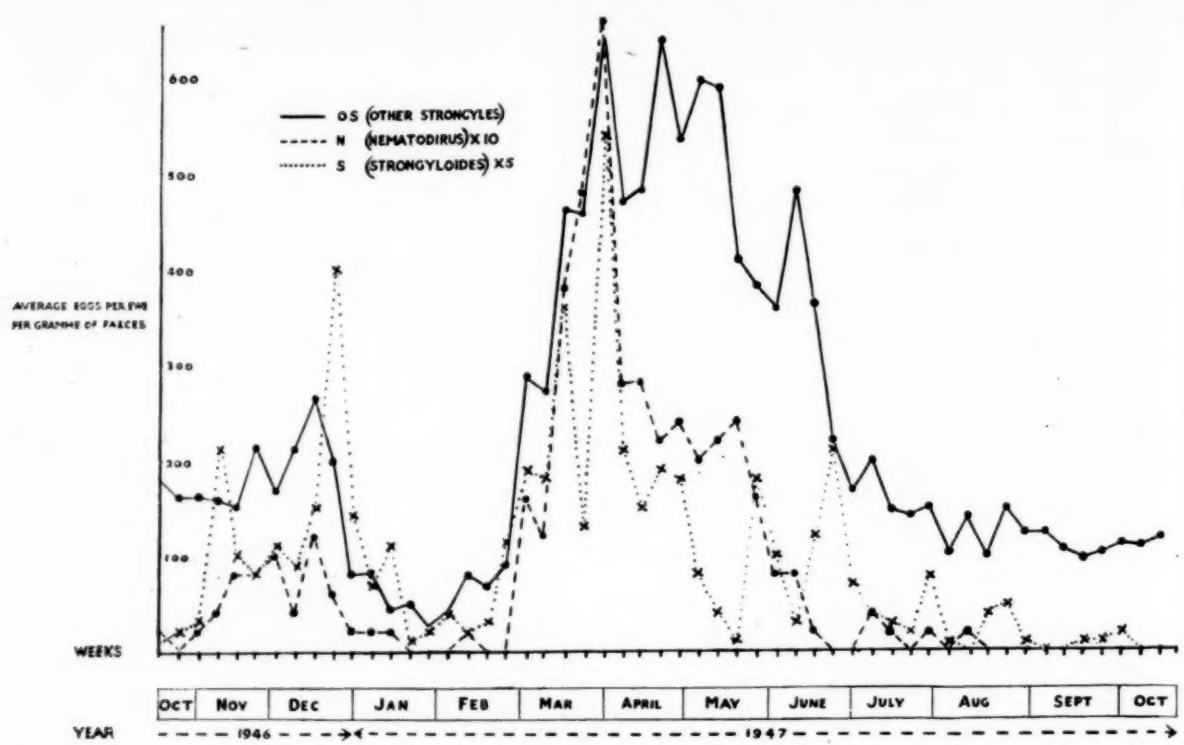
The figures for *Strongyloides papillosus* were multiplied by five to establish relationship in the figure with the "OS" curve. The egg counts for *Strongyloides papillosus* ranged more widely from week to week than other species but also show that there was the same increased egg-laying in the spring.

Incidence of *Moniezia expansa* was also recorded but not more than 15 per cent. of the flock ever showed infestation with this parasite. It is well known that failure to find eggs of this particular tapeworm in the faeces is no real indication of its absence; one week a sample may contain a few gravid proglottides and subsequently thousands of eggs, and none during the next few months. With one exception this was true of the few animals in which we observed the eggs of this worm.

The McMaster technique is not suitable for the demonstration of fluke eggs and no evidence of the incidence of this parasite in the flock is available. That it is unlikely to be high, however, is indicated by its almost total absence in various sheep which have been examined *post mortem* at this Institute during the past twelve months.

DISCUSSION

From the results (fig.) there seems little doubt that there are distinct seasonal levels of egg production by the parasitic helminths of sheep throughout the course of a year. The recent work of Morgan & Sloan (1947) presents a picture which is substantially the same as that recorded here. In their monthly examinations,



Weekly faeces egg counts (worm eggs per 1·0 gramme of fresh faeces) of 50 Blackface ewes from October, 1946, to October, 1947. (The figures for Nematodirus are multiplied by ten and for Strongyloides by five.)

they observed the egg output in a flock of 159 Blackface sheep of varying ages over a period of two years and found that the "spring peak" followed by the "summer fall" was evident in all age groups.

Discussion of such a complex problem as the "tolerance adjustment" between host and parasite is beyond the limitations of this note; but it is our opinion that the spring peak is produced by worms carried over from infestation the previous autumn. The improbability of new infestation during the wintry weather two months before the peak already has been discussed.

The figures for Nematodirus, in spite of its slower larval development, follow closely the main curve and further support the view that the rise is caused by an increase in egg laying by the worms already present. If new infestations were suggested as the explanation, it would be necessary to assume that the new infective larvae were ingested about three to four weeks before the spring peak—that is, in early March, 1947, when the temperature was well below freezing point and the ground was covered with snow. In our view it is very unlikely that new infestations could have been picked up under these circumstances.

In further opposition to the view that the spring rise can be explained by new infestation, it should be noted that there was a fall in egg output during the summer, when climatic conditions were optimal for the development of infective larvae. It is more difficult to account for the summer fall, particularly since the sheep were exposed to an extremely heavy source of infestation, having spent at least six of the twelve months they were under observation in a nine-acre field which was heavily contaminated with sheep faeces each succeeding day. In addition to the Blackfaces and their lambs, this field also carried from 23 to 45 Cheviot ewes daily during the period from April to October, 1947.

Two papers by Seghetti & Marsh reveal the same rise in egg count in spring (Seghetti & Marsh, 1945) and a marked fall in autumn (Seghetti & Marsh, 1947), even though the autumn observations concerned a flock of very heavily infested animals. These authors rightly draw attention to the confusing effect of such variations on uncontrolled experiments; but they attribute the seasonal differences in egg count to differences in the number of worms carried at different periods of the year rather than to seasonal differences in the egg-laying activities of the worms themselves.

It may naturally be objected that our observations were made in a year (October, 1946, to October, 1947) exceptional in its range of climatic conditions. An extreme winter was followed by an unusually hot and dry summer and this might be held to explain the summer fall; but it has been shown (*e.g.*, by Taylor, 1935) that some larval stages of sheep helminths withstand prolonged periods of drought without any obvious impairment of vitality. It is reasonable, therefore, to assume that in spite of the extreme climatic conditions of the 1946-47 winter and summer, a fair proportion of the eggs voided on the pasture developed to the stage of infective larvae. The work by Morgan & Sloan (1947) shows quite clearly that a summer fall of egg output was evident in all the age groups which they examined, although the summers of 1945 and 1946 were climatically normal.

Whatever the factors concerned in these fluctuations of worm-egg output, a noteworthy point is the possible relation to the anthelminthic treatment of sheep. One of the conclusions of Leiper, Peters & Clapham (1941) in their work with the anthelminthic phenothiazine (thiodiphenylamine) was that in the dosage used (1 gramme per kg. body weight) egg-laying was significantly inhibited over a considerable period without actually ridding the host of all its parasites. It may be logically concluded, therefore, that dosing before and during the peak of egg production, *i.e.*, in February, would help greatly in reducing pasture contamination and thus lessen the risk of severe loss of lambs during the most susceptible period of their life to parasitic infestation.

The possible objection that phenothiazine might be toxic to breeding ewes seems to be clearly refuted by experimental work in America by Habermann, Foster & Hummon (1942), who dosed a flock of ewes in various stages of pregnancy. Among other facts they note that (p. 393): "One ewe, given 15 Grammes of phenothiazine daily in the feed for 21 days prior to parturition, gave birth to a normal healthy lamb."

Our future observations will include a closer study of the worm burden as determined by faeces culture. So far, the work on this point suggests that the high spring and low summer levels are

mainly produced by different species; but further investigation should throw more light on this possibility.

Summary

In a flock of 50 Blackface ewe hoggs at pasture, it has been shown that:—

1. The peak of egg production by parasitic helminths was reached in the spring and was followed by a marked drop during the summer.

2. Although the ewes were exposed to an extremely heavy source of infestation over a period of twelve months, egg counts of the flock as a whole and of individual ewes were the same in October, 1947, as in October, 1946.

3. In a discussion of our findings we give reasons for our view that the increased faeces egg counts in spring arise from greater egg-laying activity by worms already present rather than from new infestation. We also suggest that anthelminthic treatment applied to the flock before or during the period of peak egg production in spring might be worth trying to reduce pasture contamination and lessen the worm burden acquired by suckling lambs.

References

Gordon, H. McL., & Whitlock, H. V. (1939.) *J. Counc. Sci. Ind. Res.* **12.** 50–52.
Habermann, R. T., Foster, O. A., & Hummon, O. J. (1942.) *N. Amer. Vet.*, **23.** 390–393.
Leiper, J. W. G., Peters, B. G., & Clapham, P. A. (1941.) *J. Helminth.* **19.** (1/2) 25–34.
Morgan, D. O., & Sloan, J. E. N. (1947.) *Scottish Agric.* **27.** 28–35.
Seghetti, L., & Marsh, H. (1945.) *Amer. J. vet. Res.* **6.** 159–164.
——— ———. (1947.) *Ibid.* **8.** 186–191.
Taylor, E. L. (1935.) *Vet. Rec.* **47.** (New Series **15**) 1339–1343.

Diagrams for the Estimation of Sulphonamide Dosage

By

R. K. HEZLET

Sulphonamide dosage is usually based on the body weight of the animal concerned and the potency of the particular drug. But there is an almost bewildering variety of units used by different authorities in the various values they recommend for such estimation.

Messrs. May & Baker, in the very useful summary in their Diary for 1947 (p. 29) start with three fundamental dosage factors: 0·1, 0·15 and 0·2 gramme per kg. of body weight. They also give rough equivalents for these factors in convenient British units.

The mixing of British and metric units in the same calculation is no doubt open to criticism, but there can also be little doubt that it may be convenient practically.

The ordinary practitioner in this country in dealing with small animals will estimate their weight in lb. He will also probably be using sulphonamides made up in ½ gramme tablets. Consequently he wants his answer in grammes for an animal of so many lb. weight.

Again, with large animals the weight will usually be estimated in cwt., and the answer as to the size of the dose may be wanted in oz.

Only a comparatively rough approximation will be required and indeed be practicable, and the mental arithmetic involved may not appear very serious to those fortunate people who can calculate quickly and correctly in this way.

Personally, from experience, I have a deep distrust of my own performances in this line and always like to have something as nearly "foolproof" as possible by which to check up. For this purpose I have found diagrams useful. Two simple ones are given in Fig. 1 (Small Animals) and Fig. 2 (Large Animals).

They are practically self-explanatory and are of the type known as "Alignment Diagrams" (or "Nomograms"). They are read with a ruler, a piece of string, or any convenient straight edge.

To illustrate their use, suppose we want to estimate the initial dose of sulphapyridine for a greyhound weighing 70 lb. For this drug May & Baker give the dosage factor as 0·15 gramme per kg.

In Fig. 1 join 70 lb. on the left-hand scale to 0·15 gramme per kg. on the right-hand scale and read the answer 4·8 gramme on the centre scale.

Again, suppose we require the dose for a beast weighing 17 cwt. with a dosage factor of 0·2 gramme per kg.

Using Fig. 2 join 17 cwt. on the left-hand scale to 0·2 gramme per kg. on the right-hand scale and read the answer 5½ oz. on the centre scale.

Fig. 1

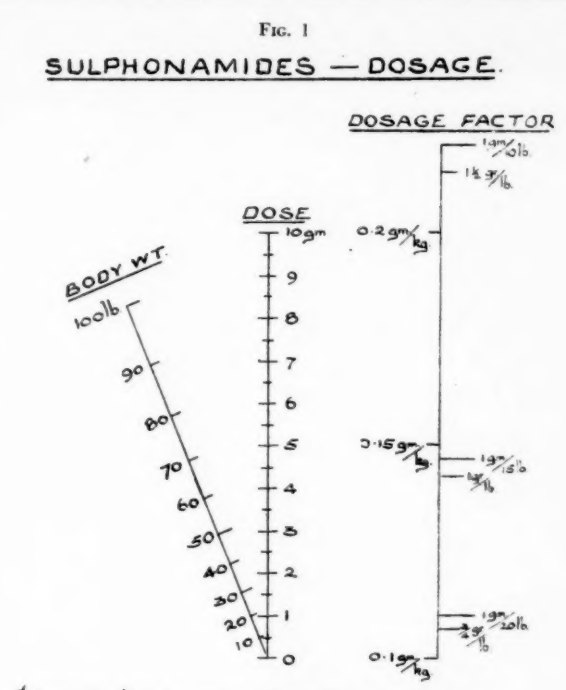
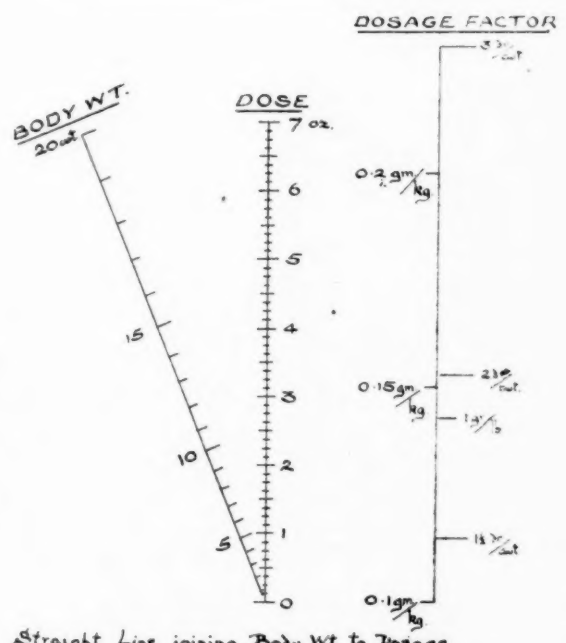


Fig. 2



In addition to the main grammes per kg. scale the dosage factor scale in both diagrams bears graduations showing factors in various combinations of units that have been suggested. With these comparisons can readily be made of the effect of using different factors.

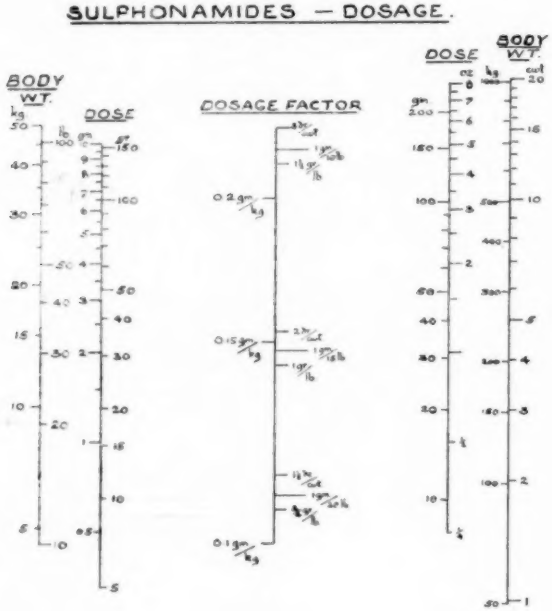
E.g.: The nearest convenient equivalent to 0·2 gramme per kg. in drams per cwt. is 3 drams per cwt. Taking a 17 cwt. beast as before, this gives (join 17 cwt. on the body weight scale, Fig. 2, to 3 drams per cwt. on the dosage factor scale) a dose of 6 oz. 3 drams, which may be compared with the previous 5½ oz.

Figs. 1 and 2 were designed from the point of view of the maximum of simplicity, but a more comprehensive diagram might have its uses too.

In Fig. 3 the large and small animal cases have been catered for on one diagram. It also gives the body weights and doses in both British and metric units, metric graduations on the left and British on the right of each scale.

Fig. 3

SULPHONAMIDES — DOSAGE.



Straight Line joining Body Wt to Dosage Factor cuts Dose scale at the corresponding Dose. A.K.H. 10.48

The scales look rather different as a logarithmic anamorphosis (giving five parallel scales) has been utilised for the better spacing of this more crowded diagram. The method of using it is on the same principle as before. The straight line joining any body weight to any dosage factor on their appropriate scales cuts the dose scale between them at the corresponding dose. This can be read straight away in British or metric units.

E.g.: Taking the 70 lb. dog and a dosage factor of 0·15 gramme per kg. as in the first example and joining 70 lb. on the right-hand side of the left-hand body weight scale of Fig. 3 to 0·15 gramme per kg. on the centre scale, we read 4·8 gramme (as before) on the left-hand side of the left-hand dose scale. We can also read 73 grains on the right-hand side of this scale if we require the answer in grains instead of grammes.

Again, taking the 17 cwt. beast and 0·2 gramme per kg. as in the second example, and using Fig. 3, we join 17 cwt. on the right-hand side of the right-hand body weight scale to 0·2 gramme per kg. on the centre scale and read 5½ oz. (as before) on the right-hand side of the right-hand dose scale.

We can also read the dose directly as about 170 grammes if wanted in this unit.

Weekly Wisdom

Nothing so accelerates our progress to the grave as an omniscient companion. We praise him, envy him, and often wish to strike him dead.—R. C. Robertson-Glasgow: *The Observer.*

THE VETERINARY RECORD

March 6, 1948

MAN-POWER IN THE ANIMAL HEALTH DIVISION

THE recent discussion in the House of Commons on the Animals Bill showed beyond dispute the great interest taken by all sections of the community in the subject of animal health, especially the control of bovine tuberculosis. Many bodies, including the N.V.M.A., have for years been pressing for a more active policy on the part of the Ministry of Agriculture and it is refreshing to realise the extent of parliamentary interest in and support for this aim.

We can readily appreciate the difficulties besetting those concerned, but it was disappointing to find that oft-repeated story of shortage of the country's veterinary man-power advanced as one of the chief obstacles to a more positive animal health policy. Such an excuse will carry little weight with informed opinion. We understand that there are some 1,200 herds ready for their " official " attestation test, which in many cases is long overdue. How did those herds reach this stage if there is such an acute shortage of veterinary surgeons? What of the hundreds of herds producing T.T. milk and the many others not eligible for that licence which, by tuberculin testing, have been brought well along the road to attestation? Obviously there is veterinary man-power in the country which is making such a contribution to the eradication of bovine tuberculosis that the understaffed Animal Health Division cannot keep the pace.

It is appreciated that the recent very extensive outbreak of fowl pest engaged the activities of many members of the Animal Health Division's staff and diverted them from more routine duties. During the past year, however, the country was relatively free from other scheduled diseases. We are, then, forced to the conclusion that the Division does not possess sufficient professional man-power to deal with the emergency created by the outbreak of a scheduled disease and, at the same time, continue even its current limited effort towards the control of bovine tuberculosis.

That lack of total veterinary man-power has not been the chief obstacle to progress in the control of tuberculosis is shown by two facts. The extension of the attested herds scheme was virtually stopped during the early years of the war when there was a surfeit of veterinary man-power. When a satisfactory monetary incentive was provided in 1943, the number of attested herds doubled within one year, at a time when the veterinary man-power in Britain was at its lowest.

The Ministry of Agriculture appears quite unable to judge the extent of the veterinary man-power of the country. It accepts the position existing within the professional establishment of its Animal Health Division as a true reflection of that in the country. It ignores the existing and increasing man-power outside the ranks of its full-time staff. This " outside " staff is making such a large contribution to the control of bovine tuberculosis that the Animal Health Division is increasingly conscious of its internal shortage.

Let us face facts. In plain language, the present hold-up in animal health plans is due almost entirely to the undermanning of the Animal Health Division—a purely sectional shortage of veterinary man-power.

The Government has made it clear that special attention should be given to the undermanned industries. Is it not time the Minister reconsidered the conditions of service in the Animal Health Division?

CLINICAL COMMUNICATIONS

Death of a Lamb caused by a Single Cysticercus tenuicollis

L. DROMEY, B.A., M.SC., PH.D., M.R.C.V.S.

and

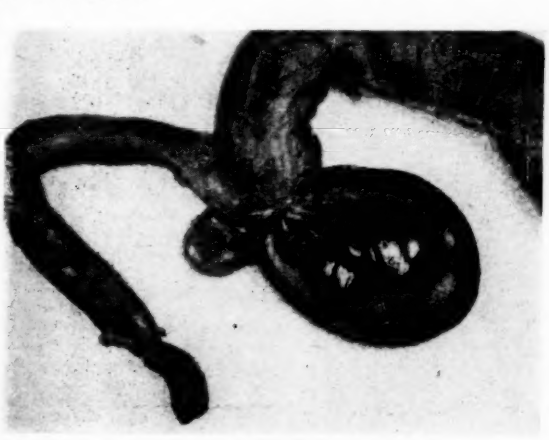
D. T. J. CAMPBELL, M.R.C.V.S.

Glasgow Veterinary College

Subject.—A six-months-old black-face lamb in fair condition.

History.—This lamb, one of a large flock, had died suddenly, and the owner suspected braxy. Four other deaths had already occurred, but these, unlike the present case, had followed on symptoms of weakness and debility.

Post-mortem *Examination.*—There was complete strangulation of the small intestine about 21 inches from the pyloric end of the abomasum. This was caused by a single *C. tenuicollis* hanging in a fold of mesentery, which apparently had become twisted round a loop of bowel, and collar-like was stretched so tightly that it could not be unravelled without rupturing the membrane (*vide* photographs).



The position of the lesion was such that the strangulation was not readily seen until some coils of the intestine had been displaced.

The bowel-wall anterior to the lesion as well as the abomasum were intensely congested and haemorrhagic, and the peritoneal cavity contained blood-stained fluid. The lungs, liver and spleen were congested and the general picture was not unlike braxy.

It is of interest to note that the bacteriological examination did, in fact, reveal, among other organisms of bowel origin, the presence of *Cl. septique* in the liver and heart blood. In view of the major findings, however, these organisms were regarded as *post-mortem* invaders.

Remarks.—How the cysticercus came to be twisted around the bowel-wall is open to conjecture. It is possible that the animal may have rolled itself, causing the cyst, enclosed in a long-necked bag of serous coat, to swing round the bowel and, assisted by the weight of its fluid content and also perhaps by the active movement of the worm cyst itself, effectively ligature it.

Complete strictures of this nature, caused by the long neck of pedunculated tumours, have from time to time been mentioned in literature.[1]

This case is of interest since strangulation of the bowel by *C. tenuicollis*, though recorded in the dog,[2] does not appear to have been noted in sheep. It also, in our opinion, provides a warning against a too cursory *post-mortem* examination in the field, as the history, time of year, as well as the general appearance of the viscera, especially the congested abomasum, all suggested braxy as a reasonable conclusion.

In view of the high incidence of *C. tenuicollis* in the mesentery of sheep, and also of the fact that comparatively few sheep are autopsied, it may well be that this occurrence is more frequent than is at present appreciated.

References

[1] Udall, W. H. (1939.) "The Practice of Veterinary Medicine."
[2] Hutyra, Marek & Manninger. (1946.) "Special Pathology and Therapeutics of Domestic Animals."

* * * * *

A Case of Fatal Staphylococcal Pyaemia in a Dog, with Abscess Formation at the Site of Penicillin Injection

O. A. ZAKI and G. SALEB

School of Veterinary Medicine, Fouad I University, Cairo

The timely editorial in your issue of January 10th indicating the grave limitations now revealed in penicillin therapy came to our notice after the fatal termination of a case in a dog which had undergone treatment at the School.

The brief history of the case is as follows: On Friday, January 16th, one of us (O. A. Z.), in company with Dr. J. T. Edwards (Visiting Professor), attended a dog belonging to a British resident in Maadi. The dog was a cocker spaniel, about twelve years old, said to have first shown signs of drowsiness about five or six days previously. Then, two or three days before our visit, it showed a very marked swelling around the back of the lower jaw extending upwards so that the eyes were practically closed. Rather irregularly every six or eight hours the owner administered sulphamethazine tablets by the mouth for a period of 48 hours, and the swelling then diminished so that when seen by us it had become circumscribed, firm and rather painful, about three to four inches in diameter and localised around the back of the left lower jaw. The dog was breathing rather heavily but was still able to take bread and milk food. Believing then that thorough treatment to promote rapid recovery could be best carried out by administering penicillin under expert supervision, Dr. Edwards advised removal of the dog to the School hospital, where it arrived on Sunday, January 18th. Inunction of the local swelling with "Numotizine" emplastrum resulted in pointing and next day it burst, the opening being enlarged surgically. The pus disclosed a pure culture of *Staphylococcus aureus*. Three loose teeth were extracted from the left jaw contiguous to the abscess, but there was no fistula communicating the septic alveoli directly with the abscess. The alveoli healed well after dressing. Penicillin in oil (Allen & Hanbury's, expiry date for use in April, 1948), two bottles of 10 c.c. each, was procured, each c.c. stated to contain 125,000 units, and treatment was commenced on Monday, 19th, by inoculating 2 c.c. twice daily at 9 a.m. and 7 p.m. into the gluteal muscles. The dog died early on Thursday morning, having been off food during the whole time of treatment. *Post-mortem*, abscesses were found at the site of each needle puncture into the gluteal muscles, and from these abscesses *Staphylococcus aureus* was isolated in pure culture. Great pains had been taken to inoculate the penicillin with well sterilised hypodermic syringes. There was also some cardiac hypertrophy and multiple foci of

inflammation were found in the lungs. Unfortunately, no more thorough examination, including tests *in vitro* upon the staphylococcus for penicillin resistance, was carried out by the staff at the time as the full significance of the finding was not appreciated. It may not be out of place to say that the lecturer in surgery (Nashid Helmy Bastawy) had warned the other staff members against the use of penicillin, because after a fairly extensive experience with it in canine practice in Cairo he had abandoned it entirely on account of the lack of satisfactory results obtained.

It would appear that in this case, contrary to expectations, penicillin therapy, if it did not actually cause death, at least hastened death, because under the prior treatment with sulphamethazine, the dog, so far at any rate as the local lesions were concerned, seemed to be tending towards recovery. The abscess formation in the submaxillary gland probably arose from the entrance of septic infection via the dental alveoli, giving rise during the acute stage to a mild generalised staphylococcal pyaemia. As a consequence of each penicillin inoculation, irritation of the tissues would appear to have been set up sufficient to cause lodgment of staphylococci and production of acute staphylococcal abscesses in the gluteal muscles.

Acknowledgment.—The authors are indebted to Dr. J. T. Edwards, Visiting Professor, for his helpful guidance in this case.

AGRICULTURE'S FUTURE PART IN THE NATIONAL ECONOMY

A Vital Decision

Addressing the Guild of Agricultural Journalists in London recently, Mr. W. J. Brown, M.P. (Rugby) said a clear decision must be taken at the centre as to the part agriculture is to play in the future economy of the country and from that decision there should flow all the moves necessary to carry it out. It was clear that agriculture should occupy a much more important place in the total economy of this country. There were three good reasons: (1) military; (2) social; and (3) economic. On two recent occasions the nation had come within an ace of defeat in war because of our dependence on imported foodstuffs. On the second point, Mr. Brown said our society was grossly disbalanced; in the development of the country in the last 100 years we had exchanged a peasantry rooted in the soil for a proletariat with no roots in anything. On the third point—economics—Britain had deserted agriculture to become the workshop of the world, resulting in a rapid rise in the standard of living for the masses. But two wars had proved that there was no monopoly in the workshop idea throughout the world. Other nations had gone in for the same idea, on a big scale, even within the Empire. Now we were on the edge of a crisis graver than had ever confronted the country—a struggle for economic survival.

Mr. Brown declared that the country could choose from three alternatives: (1) bankruptcy; (2) a resort to totalitarianism compulsion; or (3) a change of heart. The next few months would determine what it was to be. We could do much more towards feeding ourselves, but conditions must be right. There must be an incentive to labour to come forward in much greater numbers; here the way to success lay in greater amenities rather than in higher wages. And more capital must be made available to the industry.

WORLD MENACE OF SOIL EROSION

If we were to avoid actual famine in the next two or three years, the utmost, consistent with good husbandry, should be got from the land now under cultivation, Professor J. A. Scott Watson, Director-General of the N.A.A.S., told Gloucester F.U. (reports the *Farmer and Stock-Breeder*).

The world food shortage was not entirely a result of the war. As the world population increased so had world cultivation. Unfortunately vast areas had been cultivated in such a manner that erosion had taken place. The soil had been lost and the land would be of no value for a thousand years. The loss of produce of that land had to be made up and much more virgin land tilled to feed the annual increase of millions of mouths. In tropical Australia there were millions of acres of grassland which would feed cattle but the existing breeds of cattle could not live there. Experiments were being made to produce a breed of cattle which would thrive in the tropical country but all that took a great deal of time.

ABSTRACTS

[A study of the Re-exposure to *Tr. foetus* of Animals already exposed to the Infection as Virgin Heifers, with Some Observations on the Localisation of Antibody in the Genital Tract. Kerr, W. R., & Robertson, Muriel. (1947.) *J. comp. Path.* **57**. 301-313.]

In 1944, the authors of this paper studied the degree of protection afforded by the parenteral vaccination of heifers with *Trichomonas foetus*. In order to ascertain the relative resistance of vaccinated and control animals, live *Tr. foetus* were added to undiluted semen used for artificial insemination and the results showed that vaccination conferred no protection.

In this paper the results are given of the exposure of the same animals to further infection at times varying from six to 21 months after the first infection. These results show that while some degree of protection was present in those animals which had developed acute infection at the first exposure, such protection was not very durable and did not extend beyond a normal pregnancy.

Examinations of the uterine secretion and vaginal mucin in infected or sensitised animals showed that some localisation of antibody occurred in these secretions.

G. D.

* * * * *

[The Copper, Iron and Lead Contents of a Series of Livers from Normal Foetal and Newborn Lambs. McDougall, E. I. (1947.) *J. Agric. Sci.* **37**. 337-341.]

Livers were obtained from 31 foetuses (73 to 147 days after conception) and from ten lambs aged from one to 14 days. The liver weights, and the concentration and total content of copper, iron and lead are tabled, but without reference to the weights of the animals from which they were obtained. The copper content was very variable, but there appeared to be a sharp increase in both level and total storage in the last three weeks of gestation, which is noted as being the optimum time for successful prophylactic administration of copper salts to the ewe to prevent the occurrence of swayback in the lamb crop. Iron was also very variable with a similar tendency to a sharp terminal increase. It was estimated that the total liver copper at birth was in all probability adequate for normal requirements, but that the iron reserve would probably require to be supplemented, part of the additional being supplied in the ewes' milk. The values for lead varied from 4 to 18 p.p.m. on a dry matter basis, or 0·8 to 3·7 p.p.m. on wet tissue, and as these values are similar to those found in sheep from the swayback areas of Derbyshire it is assumed that lead plays no part in the cause of swayback.

W. M. A.

* * * * *

[The Variation in the Copper Content of the Blood of Normal Sheep. McDougall, E. I. (1947.) *J. Agric. Sci.* **37**. 329-336.]

From studies on a small number of ewes over three lambing seasons it is concluded that pregnancy, parturition and lactation, *per se*, produce no characteristic alterations in the blood copper level of normal ewes. Comparison of dam and offspring shows that, in relation to the maternal blood copper level the foetal level is lower, the level at birth is variable but rises sharply in the first few days of life, remaining high for about two weeks and thereafter falling gradually to adult level in about ten to 12 weeks. There was considerable variability between sheep and between samplings in the same sheep; some of this latter is attributed to the after effects of anthelmintic treatment with copper sulphate and nicotine.

W. M. A.

ELECTRICAL APPARATUS FOR THE HUMANE DESTRUCTION OF DOGS AND CATS

Our readers will recall that the N.V.M.A. Special Committee on Small-animal Euthanasia, reporting in 1937, expressed itself as fully satisfied with the use of the electric cabinet for the humane destruction of dogs, but with considerable reserve so far as its use for cats was concerned. In view of this, at that time the producers, General Electric Construction and Maintenance, Ltd., discontinued the manufacture of cat cabinets.

We now learn that, in co-operation with the Chief Veterinary Officer of the R.S.P.C.A., the cat cabinet has been redesigned and now satisfies fully the requirements of the Humane Slaughtering Committee of the R.S.P.C.A. Further particulars of the joint and separate cabinets will be announced shortly.

REVIEW

The Glasgow Veterinary College

A brochure, giving the history of the Glasgow Veterinary College, has recently been published. In it Mr. William Adair, Agricultural Editor of the *Glasgow Herald*, traces the vicissitudes of the College from its foundation in 1862 up to the year 1941.

The founder, and the College's first Principal, was James McCall, a native of Ayrshire. His fondness for horses led him to abandon a legal training, and he joined the staff of Messrs. Pickford and Co. in London, later becoming superintendent of their horse department. It was then that veterinary medicine began to attract him and he left London for Edinburgh, where he became a student at the Dick Veterinary College. After qualifying, which in those days took two years, McCall was for a time in practice in Ayrshire, then Professor of Anatomy at the Dick. In 1859, at the age of 25, he set up practice in Glasgow, where he also started a course of lectures for Edinburgh students living in the city. Only three years later, he applied for a Charter, and the following year this was granted by Queen Victoria; the "new Veterinary College, Glasgow" being officially recognised in 1863. The third, and final, move to the present premises took place at some later date.

In the early days the number of students was probably 30 or 40, but by 1887—when the course was of three years' duration—the figure had risen to nearly 150. About one-third of the students came from Ireland, and the opening of the Dublin Veterinary College in 1895 meant a severe financial blow for the Glasgow Principal.

The extension of the course to four years, also in 1895, involved heavier teaching expenses, while the new matriculation standard diminished the number of Scottish entrants. By 1907 McCall had enlisted public support, and the College was incorporated as a Central Institution in 1908, the buildings being purchased from him.

McCall remained Principal until his death in 1915, by which time he made an additional reputation in the sphere of meat inspection and public health. It was to his credit that Glasgow was the most advanced city in this respect.

Mr. Hugh Begg, F.R.C.V.S., followed as temporary Principal, and in 1917 Mr. S. H. Gaiger took over. Professor Gaiger, who had lost an arm as the result of glanders, had gained much experience abroad, mainly in Chile and India (at the Muktesar Research Station). He established the College's bacteriological laboratory, where research into the diseases of sheep was carried out, and a vaccine for braxy evolved.

During the next few years the College suffered again from financial difficulties, and a public appeal, which the Governors had drafted to raise funds, had to be abandoned in the face of Government opposition. The official view was that the progress of veterinary education could best be assured by concentrating resources at one centre, and that the appropriate centre was Edinburgh. A significant move was the appointment of Principal Gaiger, and his Assistant, Professor Thomas Dalling, M.A., M.R.C.V.S., to be Joint Directors of the Animal Diseases Research Association in Edinburgh.

Dr. A. W. Whitehouse, M.R.C.V.S., succeeded as Principal in 1922. A classical scholar at Winchester, he went to Oriel College, Oxford, but, before taking a degree, left for the United States. Here he followed the occupation of ranching, both in Colorado and Wyoming; in the latter State he and his sister were in charge of a ranch of 160,000 acres. Obtaining a veterinary qualification at Toronto, he returned for a time to ranching, then took the final year of the veterinary course at Colorado, and went into practice. He also taught anatomy to Veterinary students in Colorado, before leaving for France as a veterinary officer. Subsequently, he spent a year at Liverpool in order to qualify as M.R.C.V.S. and then went to the Glasgow College as Director of Studies. As Principal he saw the number of students rise from 50 to 300.

The following years were difficult ones for the College. In 1923 the Secretary of the Board of Agriculture for Scotland announced that further grants from public funds would shortly be withheld and that amalgamation with the Royal (Dick) College was desirable. In 1924 a committee was set up, under the Chairmanship of Lord Constable, to enquire into agricultural research in Scotland. The committee considered the two veterinary colleges, and recommended that State assistance for Glasgow should cease. Mr. Walter Elliot, M.P., dissented, maintaining that the standard of teaching at Glasgow compared favourably with elsewhere, that the Western area was important enough to have a Dairy Research Institute, and that grants to help the subsistence in Edinburgh of students from the west meant simply a transfer of expense from one Public Department to another.

The Government grant ceased in 1925, and the College had to rely upon students' fees for 80 per cent. of its income, the remainder coming from local authorities. The future of the College is uncertain. New buildings on a rural site are needed, but a pre-war estimate gave the cost as £112,000, with £20,000 a year for maintenance costs.

The College is probably unique in one respect, for out of 282 students in 1936-37, 223 lived within easy daily reach. Seven out of ten lived at home or with relatives while taking the course, and a similar number were in receipt of grants, scholarships or bursaries.

It is a remarkable and well told story of a brave struggle for survival against adverse forces, in which many have played a notable part: in view of its recognition in the 1948 Honours List we may instance that of Mr. James Austin, the Honorary Secretary and Treasurer, who has been indefatigable in striving for the secure establishment in the West of Scotland of a college for veterinary education. We wish him, and his present Principal, Mr. A. A. Forsyth, well-merited success in their continuing endeavours to that end.

REPORT

[Department of Agriculture, Canada. Report of the Veterinary Director General (T. Childs) for the year ended March 31st, 1947.]

In his report for the fiscal year, the new Veterinary Director General, Dr. T. Childs, outlines the trends in veterinary state medicine in Canada.

The shortage of veterinary inspectors has seriously hampered the control or eradication of bovine tuberculosis and brucellosis, and little can be done on a comprehensive scale until the veterinary staff is increased. Revised salaries have induced a number of experienced veterinary inspectors to remain in the Service, rather than seek more lucrative employment elsewhere. But there have been fewer candidates seeking entry into the Service, partly on account of the more attractive prospects offered by private practice and partly on account of the smaller number of men who have graduated in veterinary science of recent years.

Canada is free from foot-and-mouth disease, Newcastle disease, glanders, dourine, rabies, and sheep-scab. The last outbreak of rabies was in 1942. Sheep-scab has not been seen since 1927, nor glanders since 1939. During the year 1946 to 1947 anthrax was limited to one outbreak involving 27 head of cattle of which three died, and swine fever to places where 44 pigs were slaughtered.

There are 2,681 herds under the supervision of the Department of Agriculture for the control of Bang's disease (Brucellosis). Of these, 1,779 are listed as free from the disease.

As mentioned above, the eradication of tuberculosis makes slow progress on account of the shortage of veterinary inspectors. The figures for Canada, however, make striking contrast with those for the United Kingdom. Under the Accredited Herd Plan, 302,656 cattle were tested during the year, and of these the reactors numbered only 0·2 per cent. Compensation amounting to $52,578 was paid in respect of 698 reactors slaughtered. Area testing of 411,652 cattle revealed 2,981 reactors (0·7 per cent.), of which 2,961 were slaughtered, $107,132 being paid in compensation.

In the Meat and Canned Foods Section of the Department, the year was one of increased activity, to meet which staff had to be borrowed from the Contagious Diseases Section. By the end of the year 108 establishments were under inspection.

There were examined during the year 2,627 samples of *e.g.*, cured meats, lard and sausages; 7,393,205 carcases were approved, and 41,502 condemned. This last figure includes 12,457 cattle, 28 per cent. of condemnations being on account of tuberculosis and 17 per cent. because of "emaciation and mucoid degeneration."

Woman Bites Dog.—To prove to the Lewes magistrates that her eight-months-old terrier was not vicious, Miss Ethel May Attenborough, 80, of Malling Street, Lewes, called it into court and bit its nose and a paw. The dog did not seem to mind, but Miss Attenborough was fined £1 for failing to comply with an order to keep the dog under control and was ordered to pay 5s. costs. A neighbour, Mrs. Mary Bryant, complained that the dog attacked her in the street.—*The Times*.

QUESTIONS IN PARLIAMENT

Livestock Diseases (Veterinary Service)

Mr. Philips Price asked the Minister of Agriculture the numbers of veterinary surgeons engaged in administering the bovine tuberculosis eradication and other disease control schemes for livestock; what number of these are engaged full time on these schemes; and what number are working part time as well as at their private practices.

Mr. T. Williams: Some 1,770 veterinary surgeons are employed by my Department upon the eradication and control of diseases of livestock; of these 386 are whole-time officers and the remainder part-time.

. . . . . .

Imported Meat (Inspection)

Mr. Sutcliffe asked the Minister of Food what steps are taken to ensure that imported meat is clean and fit for sale or delivery to retail shops.

Mr. Strachey: Meat is inspected both on and after arrival, and every effort is made by the officers of my agents and of the public health authorities to maintain a good standard. If the hon. Member will inform me of any particular case for criticism, I shall be glad to look into it.

Mr. Sutcliffe: Is the right hon. Gentleman aware that in certain towns meat is received with dirt so deeply embedded in it that it is unsaleable, and that there is, therefore, waste? I will, as the right hon. Gentleman suggests, send him particulars.

. . . . . .

Civil Servants (Political Activities Committee)

Mr. Randall asked the Chancellor of the Exchequer whether he has considered the representations made by the staff side of the National Whitley Council on political activities by civil servants; and whether he has any statement to make.

Sir S. Cripps: Yes. The Government recognise that there is a case for considering whether the present rules require modification. But in a difficult and controversial question of this nature they wish to have the advice of an independent body of opinion and I propose, therefore, to set up a Committee for this purpose with the following terms of reference:—

"To examine the existing limitations on the political activities (both national and local) which may be undertaken by civilian Government staffs, and to make recommendations as to any changes which may be desirable in the public interest."

The composition of the Committee will be announced very shortly.

. . . . . .

Agriculture: Research (United Kingdom and Eire)

Sir P. Hannon asked the Minister of Agriculture if consultation and exchange of results on experiment and research are being maintained between his Ministry and the Agricultural Ministry of Eire, with a view to increased effort to stimulate agricultural production and increase of food supply; and what official machinery is is now operative with this objective.

Mr. G. Brown: These purposes are achieved not by direct contact between the two Ministries but through the medium of the Commonwealth Agricultural Bureaux organisation. This organisation consists of eleven bureaux and two institutes and is jointly financed and governed by the several countries of the Commonwealth and Empire through a representative Council. Eire and this country are represented, also, on the Standing Committee of the British Commonwealth Scientific Official Conference which provides another means of consultation and exchange of information on scientific matters.

. . . . . .

County Committees (Sub-Committees)

Mr. Hurd asked the Minister of Agriculture the functions of the several sub-committees of the county agricultural executive committees which are now being established; and the total staff which will be required for the committees' operations.

Mr. T. Williams: In accordance with the provisions of Section 71 (3) of the Agriculture Act, 1947, I have asked the county agricultural executive committees to set up sub-committees to deal with horticulture, livestock, milk, poultry, estate management, husbandry, labour, machinery, pests, feeding-stuffs, finance and training. I have also informed committees that they may in special cases suggest the establishment of other sub-committees such as a technical organisation sub-committee. I am sending the hon. Member detailed notes on the precise functions of these sub-committees. It is expected that the total staff required for the committees' operations will be not less than the present 3,300 technical and administrative staff and 6,600 clerks and typists.

Newsprint (Farming Periodicals)

Mr. De la Bere asked the President of the Board of Trade whether he is aware that, owing to shortage of newsprint, certain farming periodicals have had to reduce their circulation and, in view of the importance of food production and the great service that these papers render to the farming community, if he will take steps to increase the allocation of newsprint for these old established papers.

Mr. H. Wilson: No further reduction is at present contemplated in the consumption of paper by periodicals, but I am afraid it is not possible to allow any increase in the supply at this stage even for farming papers owing to the serious shortage of paper.

Mr. De la Bere: Is the right hon. Gentleman aware how very desirable it is to encourage everyone to take an interest in the cultivation of the land? How is it possible to do so if we cannot get a wide circulation of responsible papers?

Mr. Wilson: Yes, I am aware of that, and in fact the farming papers, as well as other technical journals, did escape the last cut in paper supplies.

ROYAL SHOW AT YORK

The Royal Agricultural Society of England will hold its annual show from July 6th to 9th on the Knavesmire, York. The prize list for livestock and other exhibits has now been issued, and is available from the Society's headquarters, 16, Bedford Square, London, W.C.1. Prizes to be awarded for horses, cattle, sheep, goats, pigs and poultry, amount to more than £15,000.

There are separate classes for 16 breeds of horses and ponies. In the cattle section 21 breeds will be represented; goats have nine classes, including two milk yields events; there will be 23 breeds of sheep and ten of pigs, and poultry (including ducks, geese and turkeys) have a classification extending to 23 different breeds.

Dairy and dual-purpose cattle will be accepted for entry only if from attested or supervised herds under the Ministry of Agriculture's Tuberculosis (Attested Herds) Scheme. Beef cattle must be from attested, supervised or licensed T.T. herds; or they must have passed the intradermal tuberculin test on or after May 18th, 1948. For the purposes of the Show a supervised herd is one which on April 3rd, 1948, has passed two tuberculin tests and for which application for a Certificate of Attestation has been made and accepted by the Ministry of Agriculture and Fisheries.

The awards for teams of three or four working heavy horses, shown in harness and with their vehicle, amount to £70 per class. Other classes are also provided for liberally. The Society has strengthened its support of jumping to such an extent that no less than £470 is available. A new attraction is a handsome cup presented by the Earl of Athlone for the open event on the final day.

NOTES AND NEWS

Diary of Events

Mar. 9th.—Scientific Meeting of the Zoological Society of London, at the Zoological Gardens, Regent's Park, N.W., 5 p.m.

Mar. 10th and 11th.—Special Meetings of Council, R.C.V.S.

Mar. 12th.—Annual Meeting of the Biochemical Society, Department of Biochemistry, University College, Gower Street, London, W.C.1, 2 p.m.

Mar. 17th.—Meeting of the Association of Veterinary Teachers and Research Workers (Scottish Regional Group), at the Royal (Dick) Veterinary College, 2.30 p.m.

Mar. 18th.—Meeting of the North Wales Division, N.V.M.A., at Ruthin (Council Chamber), 2 p.m.

Mar. 25th.—Annual Meeting and Luncheon of the Western Counties Division, N.V.M.A., at Exeter (Rougemont Hotel).

April 7th, 8th, 9th.—N.V.M.A. Committees and Council.

April 14th, 15th and 16th.—Quarterly meetings of Council, R.C.V.S.

Sept. 8th to 15th (inclusive).—N.V.M.A. Congress at Southport.

Congress Hotel List

The terms set out in the list of recommended Hotels and Boarding Houses (see page 115) are those which were ruling at the time the list was compiled.

Owing to the higher wages which have now to be paid to workers in the catering trades and other increased expenses, charges for accommodation are liable to be raised without notice, and no guarantee can be given to members who have not yet booked accommodation that the rates shown in the list still apply.

* * * * *

N.V.M.A. Handbook on Poultry Diseases

[Second Edition]

With this issue of *The Veterinary Record* distribution is made to members, N.V.M.A., of the second edition of the Handbook on the Diseases of Poultry. Prepared by the Association's Advisory Committee on Poultry Diseases, the new edition represents a completely revised and considerably enlarged version, also profusely illustrated, of the first edition, published in 1937. Any members failing to receive their copy should apply to the General Secretary, N.V.M.A., 36, Gordon Square, London, W.C.1. Announcement will be made in due course when copies are available for students.

* * * * *

PERSONAL

Births.—Bullen.—On February 15th, 1948, at Duck-end, Dry Drayton, Camb., to Catherine Bullen, M.R.C.V.S. (née Clark) wife of John J. Bullen, M.R.C.V.S.—a daughter.

Henderson.—On February 24th, 1948, to Beryl, wife of W. M. Henderson, Pirbright, Surrey—a son.

Pomphrey.—On February 25th, 1948, at Bottom House, Savile Road, Dewsbury, Yorks—to May (née Donaldson), wife of A. M. Pomphrey, M.R.C.V.S.—a daughter (Anne Donaldson).

. . . . . .

Marriage.—Welch-Lovell.—On February 21st, 1948, at Melton Mowbray, Arthur George Welch, M.R.C.V.S., of Lincoln, to Miss Olive Maisie Lovell, of Melton Mowbray.

. . . . . .

Forthcoming Marriage.—Slee—Chittleburgh.—The engagement is announced between Alan Slee, M.R.C.V.S., only son of Mr. and Mrs. W. J. Slee, of Edinburgh, and June Thelma, only daughter of Mr. and Mrs. C. F. Chittleburgh, of C.C.G. Dusseldorf, Germany.

. . . . . .

Holiday Exchange (*The Hague*).—A Dutch girl (15½), daughter of the Director of a hospital organisation in the Netherlands, wishes to exchange a summer holiday hospitality visit with the daughter or son of a veterinary surgeon on this side. Replies, headed as above, should be addressed in the first instance to the General Secretary, N.V.M.A., 36, Gordon Square, London, W.C.1.

. . . . . .

Her many friends in the profession will be glad to learn of the success which has attended a throat operation recently undergone by Lady Dalrymple-Champneys in a London hospital.

* * * * *

R.C.V.S. OBITUARY

Baldwin, William Edwards Woode, Holmleigh, Polruan, Fowey, Cornwall. Graduated London, December 16th, 1886. Died February 21st, 1948: aged 85 years.

Wood, John Stewart, Captain and Hon. Major late R.A.V.C. (T.F.), of Walton Lodge, Parkstone, Dorset. Graduated London, March 27th, 1896. Died February 23rd, 1948: aged 75 years.

The Late Capt. J. H. Stewart, M.C., M.R.C.V.S.

A Tribute

On the 15th ult., at the age of 58, James Hamilton Stewart, like so many before him, died with still much he wanted to do, unfinished.

Before embarking on his veterinary career, he spent some four years in shipping but the very wide practice in Cardiff enjoyed by his well-known father inevitably beckoned him. Whilst at the Royal Veterinary College, London, he captained the "Fifteen" and not nine months ago did we handle the cap as well as the photograph of the team even though the latter was perhaps the "worse for wear" on its retrieve from seclusion. His love of the game abated not, for even on the 7th ult. he "listened in" to the Wales versus Scotland match being fought out not half a mile away.

Qualifying in December, 1914, after sharing the Williams Memorial Prize with W. J. Bambridge and T. Dalling, he served with the R.A.V.C., gaining the Military Cross.

Always a hard worker, the up-to-date practice of his profession with the jealous safeguarding of its prestige was known outside Glamorgan. He did much for Cardiff May Show, acting as Joint Hon. Secretary. He was President of the Cardiff Canine Society whilst all agricultural show committees in and around Cardiff always claimed his official services. His strenuous, single-handed working, however, claimed its toll and though its true extent was known only to his wife, he has suffered much during the ten past years. Some two years ago he had to rest owing to the existence of an inflammatory condition of the occipito-atlantal joint but his indomitable courage carried him through even a bad car smash encountered soon after he resumed work; but in October last came collapse.

That his clients realised that they had lost a counsellor and friend was evidenced by the size of the gathering of agriculturalists at the funeral at St. Mellons Church on February 18th. Many others present included the County Chief Constable whilst there has previously appeared in your columns an account of the names of his professional brethren who paid their last respects.

To his wife, his daughter Helen and son David go our sincere sympathy.

We who have tasted of his kindness and smiling fellowship say, it is good to have known "Jimmy" Stewart.

W. J. L.

* * * * *

RESTORATION TO R.C.V.S. REGISTER

The name of Major Earle McKillop Nicholl, O.B.E., of 48, Werneth Hall Road, Ilford, Essex, which was removed from the Register of Veterinary Surgeons under sub-section 4, of section 5 of the Veterinary Surgeons Act, 1881, has been restored to the Register as from February 23rd, 1948, he having, by statutory declaration made under the Veterinary Surgeons Act, 1881, shown sufficient cause for his failure to comply with the provisions of the Act.

* * * * *

ANIMAL HEALTH TRUST

As intimated in our last issue, in future the Veterinary Educational Trust will be known as the Animal Health Trust. Mr. Charles Vivian has been appointed Information Officer of the Trust.

Among those selected to join the scientific staff of the Animal Health Trust's new poultry research centre, of which Dr. Gordon is Director, is Mr. C. Horton-Smith, B.Sc., an outstanding figure in the poultry world.

Mr. C. Horton-Smith, B.Sc., is best known to the poultry industry for his great work on the life history of coccidia and made the discovery of the value of sulphamezathine in the treatment of coccidiosis. For the past ten years he has carried out research work for the Agricultural Research Council and at the Ministry of Agriculture's laboratory at Weybridge.

* * * * *

The Ministry of Agriculture has referred to the Agricultural Land Commission land in Romney Marsh—approximately 50,000 acres—lying mainly in Kent, and partly in east Sussex.

The Commission will consider whether efficient use of this land for agriculture is being prevented by reason of work not being carried out, or fixed equipment not being provided, and whether it can reasonably be expected to be carried out without the exercise of powers of purchase. The Commission will report to the Minister.

* * * * *

Evans Medical Supplies Ltd., recently entertained four of the Final Year Veterinary Students who were awarded the Evans Veterinary Studentships for 1947-48. The programme included a conducted tour of the Company's principal establishments in Liverpool and Runcorn.

NATIONAL VETERINARY MEDICAL ASSOCIATION

Annual Congress at Southport, 1948

The following is the provisional programme of the Association's Congress to be held in Southport from September 8th to 15th.

Wednesday, September 8th

Evening reception by the Lancashire Division.

Thursday, September 9th

10 a.m.	... ...	Opening of Congress by the Mayor of Southport.
10.30 a.m.	... ...	Opening of Exhibition of Surgical Instruments, Drugs, etc., by the President, N.V.M.A.
11 a.m.	... ...	Paper: "The Tuberculin Test." By Professor T. Dalling, M.A., M.R.C.V.S. Openers of discussion: Mr. G. H. Arthur, M.V.Sc., M.R.C.V.S., and Mr. J. McWilliam, M.R.C.V.S.
Afternoon	... ...	Public address. Sir John Boyd Orr, D.S.O., M.C., LL.D., F.R.S., "World Food and Agriculture."
8 p.m.	... ...	Civic Reception at the Floral Hall.

Friday, September 10th

Visit to the various departments of Liverpool University, with a welcome by the Vice-Chancellor, and tour of the buildings, and to "Leahurst" for demonstrations and tea.

8 p.m.	... ...	President's Reception.

Saturday, September 11th

Morning	... ...	Annual General Meeting.
Evening	... ...	May arrange block booking at theatre.

Sunday, September 12th

Excursions if desired to Blackpool and Lake District.

Monday, September 13th

10 a.m.	... ...	Paper: "Equine Accidents in the Fields of Sport." By Major H. Sumner, M.R.C.V.S., D.V.H. Openers of discussion: Mr. E. Brayley Reynolds, O.B.E., M.R.C.V.S., and Mr. J. S. Cosgrove, M.R.C.V.S.
Afternoon	... ...	Paper: "The Present Situation with regard to Food Inspection in England and Wales." By Mr. H. Thornton, B.V.Sc., M.R.C.V.S., D.V.H.
Evening	... ...	Annual Banquet—if this can be arranged.

Tuesday, September 14th

10 a.m.	... ...	Paper: "Avian Salmonellosis." By Mr. J. E. Wilson, B.Sc., M.R.C.V.S., F.R.S.E. Opener of discussion: Dr. R. F. Gordon, B.Sc., M.R.C.V.S.
11.30 a.m.	... ...	Paper: "Canine Leptospirosis." By Miss J. O. Joshua, M.R.C.V.S. Openers of discussion: Dr. R. D. Stuart, M.D., D.Sc., D.P.H., and Miss Susan Mills, B.V.Sc., M.R.C.V.S.
Afternoon	... ...	Divisional (Sectional) Meetings.
Evening	... ...	Ladies' V.V.B.F. Dance.

Wednesday, September 15th

10 a.m.	... ...	Closing Meeting.
11.30 a.m.	... ...	Council Meeting.

N.V.M.A. CONGRESS, 1948

September 8th - 15th (inclusive)

List of Hotels in Southport *

	Charge per Day	
	Full Board	*Bed and Breakfast*
LICENSED HOTELS		
Prince of Wales Hotel, Lord Street, Southport (*Headquarters*) ...	30/-	—
Palace Hotel, Westcliffe Road, Birkdale	25/- to 35/-	—
Bold Hotel, Lord Street, Southport	25/-	16/6
Crown Hotel, Liverpool Road, Birkdale	—	12/6
Queen's Hotel, Promenade, Southport	25/-	—
Scarisbrick Hotel, Lord Street, Southport	25/-	—
	21/- 7 days or over	
CONDITIONALLY LICENSED HOTELS		
Alexandra Hotel, Alexandra Road, Southport	25/-	—
Belle Vue Hotel, Lord Street West, Southport	From 35/-	—
Clifton Hotel, Promenade, Southport	22/6 to 30/-	—
Mornington Hotel, Hoghton Street, Southport	23/6 to 24/6	15/- to 16/-
UNLICENSED HOTELS		
Carlton Hotel, Lord Street, Southport	25/-	—
Gables Private Hotel, Hoghton Street, Southport	21/6 to 23/6	—
Sandringham Hotel, Promenade, Southport	21/- to 25/-	Saturday to Saturday bookings only
Waverley Hotel, Promenade, Southport	25/-	—
PRIVATE HOTELS AND BOARDING HOUSES		
Mrs. E. Bartle, Seafield, 2, Irving Street, Southport	14/6	—
Chantrey House, 7, Albert Road, Southport	18/6	12/6
Easemore Private Hotel, 3, Portland Street, Southport	16/6	11/6
Eyredene, 8, Knowsley Road, Southport	17/6	10/6
Franklyn Hotel, 65–65a, Promenade, Southport...	21/-	—
Mrs. N. D. Holt, Derby House, 6, Knowsley Road, Southport ...	17/6	10/6
Hopefield Private Hotel, 12, Albany Road, Southport	17/6	10/6 Saturday to Saturday bookings only
Messrs. Hulley & Shufflebottom, 31, Leicester Street, Southport ...	17/6	12/6
Ivanhoe Private Hotel, 87, Avondale Road, Southport	15/6	—
Knowsley Private Hotel, 2, Knowsley Road, Southport	17/6	10/6
Marlborough Private Hotel, 9, Church Street, Southport	14/-	10/-
Mr. J. W. Matthews, Barrowfield, 37, Leicester Street, Southport ...	18/6	—
Orleans Private Hotel, 8, Lathom Road, Southport	22/6	13/-
Queen's Gate Private Hotel, 49, Queen's Road, Southport	21/-	12/6
Russell Hotel, 56, Promenade, Southport	18/6	12/6
Stafford House, 18, Bank Square, Southport (Mrs. M. W. Howarth)	15/6	10/6
Stella Maris Private Hotel, 25, Promenade, Southport	18/6	12/6
Summerfield Private Hotel, 31, Leicester Street, Southport	17/6	12/6 Saturday to Saturday bookings only
Talbot Private Hotel, Portland Street, Southport	18/6	11/6
Tatley Private Hotel, 83, Manchester Road, Southport	17/6	12/6
Mr. H. Tyson, 39, Bath Street, Southport	15/-	10/6
Willow Bank Private Hotel, 117, Leyland Road, Southport	15/-	10/6 Saturday to Saturday bookings only

* **Members are advised to make reservations by March 25th, otherwise accommodation cannot be guaranteed.**

All Old Blues interested in agriculture and its ancillary industries are asked to write to W. J. Wilson, c/o J. F. Codd, Esq., The Estate Office, Christ's Hospital, Horsham, Sussex. A meeting is to be arranged in London during the Dairy Show, to discuss the proposal to form an Agricultural Section of the Christ's Hospital Club.

* * * * *

ADDRESSES OF DISEASE-INFECTED PREMISES

The list given below indicates, first, the county in which are situated the premises on which disease has been confirmed, followed by the postal address and date of outbreak.

SHEEP SCAB:

Sussex (East).—Hayleigh Farm, Westmeston, Hassocks, Sussex. (Feb. 24th).

* * * * *

The Clydesdale Horse Society's Panel of Judges for 1948-49 includes the names of Professor J. R. McCall, M.R.C.V.S., of Glasgow, and Mr. Robert M. Smith, M.R.C.V.S., of Galston, Ayrshire.

CORRESPONDENCE

Correspondents should write as briefly as possible and letters should not exceed 350 words.

The views expressed in letters addressed to the Editor represent the personal opinions of the writer only and their publication does not imply endorsement by the N.V.M.A.

CONDITIONS OF EMPLOYMENT OF VETERINARY ASSISTANTS

Sir,—One has noted, as you kindly point out in your issue dated February 21st, the publication of correspondence dated October 5th, 1947. This letter was evidently in answer to a letter published in your issue dated October 4th, 1947, and one has a very good idea why the Editorial Committee considered it advisable to delay publication.

Inter-professional criticism should never weaken in the long run; from within criticism is easily tolerated, from without one feels it to be almost impertinent. Now one imagines an anxious man in Whitehall poring over issue after issue of the *Record* (I trust he pays for his copy) eagerly looking for signs of the first rift! Why not confuse him with a red herring now and again?

One would, however, draw your readers' attention to page 74 in your issue dated February 14th. One wonders if soon the B.M.A. will turn to their counterparts in our beloved profession and say: "*Hodie mihi, cras tibi.*"

Yours faithfully,

Thorns Hall, Sedbergh, Yorks, W.R. JOHN D. PARKINSON.

February 22nd, 1948.

. . . .

Sir,—May I heartily endorse the sentiments expressed by Mr. J. E. Johnson in his letter of October 5th, which appeared in the *Record* on February 21st.

It is puzzling that the N.V.M.A., while being so concerned—and rightly so—with the salaries offered to members of the Animal Health Division of the Ministry of Agriculture and Fisheries, should remain oblivious to affairs nearer home—*i.e.*, the salaries and conditions of assistants in general practice. Even with present-day improvements due to the relative shortage of assistants, salaries offered by the Ministry of Agriculture compare favourably in several instances to those offered in practice, and the regular and ample leisure hours found in Ministry positions offer scope for recreation and social life unequalled in practice. Too often the assistant finds that the necessity for remaining "on call" effectively precludes any form of social life or interests other than strictly veterinary ones.

Might I suggest that the N.V.M.A. would go far in convincing the Ministry of the need for higher salaries, and also the younger members of the profession of its sincerity, if it publicly announced what it considers to be the minimum in salaries and conditions for those acting as assistants in general practice.

When members of the profession show their low opinion of their own qualification, as evidenced by salaries and conditions of 1939-41, it is small wonder that outsiders adopt a similar valuation.

Yours faithfully,

4, Union Terrace, Barnstaple, D. Devon. R. W. M. GOVER.

February 22nd, 1948.

[As intimated in the report of the September, 1947, meeting of Council, N.V.M.A. (Suppl. *Vet. Rec.* **8**. 104) the subject of the salaries and conditions of employment of assistants in veterinary practice is under serious consideration by the Home Appointments Committee. In view, however, of the varying conditions of practice, it has not been found possible, *inter alia*, to suggest a minimum salary.—*Editor.*]

. . . .

Sir,—The three letters which compose your "Correspondence" of February 21st, 1948, raise sharply from different angles questions affecting our younger graduates. The letter of J. E. Johnson, though written in a bitter strain, throws valuable light on the economic problems confronting veterinary assistants.

The unexplained delay of four months in its publication may incline some to draw an unfortunate conclusion. If a "union of assistants" does in fact exist surely it is the duty of our journal to render such a body assistance by allowing it public expression? Since assistants no doubt represent a fair portion of the N.V.M.A. membership why cannot we have questions concerning their status, salaries and conditions clarified in committee and a recommended code published throughout the profession? Representation of the assistants directly would no doubt be allowed in the discussions of such a code.

Another angle on the position of younger graduates comes out in the discussion on *The Veterinary Record*. I believe we have a first-class professional journal but letters such as that of P. J. Dalton, indulging as it does in scoffing criticism of a colleague's effort at clinical description, do not encourage our younger graduates to venture into print. Incidentally, would Mr. Dalton publish his treatment for "otitis" which is so rapidly successful that his clients would not be patient enough to wait three weeks for a cure? If every clinical communication sent in must be weighed in the balance "of scientific worth" before publication then our journal will soon cease to be the live, practical weapon of a working profession and will become the intellectual playground and preserve of our professors and specialists.

There is not an active veterinarian in the country whose everyday experience in the field is not a goldmine for the columns of *The Veterinary Record*, provided we learn how it can be tapped.

Surely the test of a journal such as ours is that it should reflect the accumulated and crystallised experience of the profession as a whole?

Yours faithfully,

Canine Defence Hospital, J. M. MITCHELL, M.R.C.V.S.
Chestnut Avenue,
Hampton, Middx.

February 23rd, 1948.

* * * * *

TWO RECENT CASE REPORTS

Sir,—I feel that I must reply to P. J. Dalton's rather scathing and unhealthy criticism of the two articles by N. H. Bastawy.

Concerning the faecolith in the cat, I admit that Bastawy did not seem to diagnose the condition and did not give any details of his treatment, but if, on *post-mortem* examination, he found the whole of the large intestine impacted, I would like to ask Dalton what treatment he, on diagnosing the condition correctly as no doubt he would have done, since he has been qualified over six months, would have applied that would have been of any avail.

I am sure no purgative of any kind would have moved that obstruction, even if the cat did not vomit it, and a strong purgative would have either caused an intussusception or a rupture in the bowel, and much of the faecolith would be out of reach per rectum.

Unless I am grossly misled this was more than a "fur ball."

I would also like to ask Mr. Dalton if he has ever made a wrong diagnosis—or has he not got the courage to *post-mortem* the cases which do not respond to his treatment?

As regards the "canker" cases, six of the ten reported on were cured in 14 days or less. But perhaps Dalton has not yet come across the type of "canker" which is an affection of the sebaceous and ceruminous glands with ulceration, and the later stage of this type when the glands have atrophied and are replaced by excess fibrous tissue formation and excrescences which close the auditory meatus.

If he can cure some of these in less than 14 days—I will even give him 22 2/5 days!—I would very much like to hear what his treatment is and I am sure some of my colleagues would too (unless it is zinc sulphophenate!).

Yours faithfully,

Veterinary Infirmary, A. G. M. RUSSELL.
China Street,
Lancaster.

February 22nd, 1948.